

Section A

Text 1

Study the poster below and answer Questions 1 to 4 in the Question Booklet.



PLANTS
MAKE
US
HAPPY

They make foes reach out
to become friends.
**They also make
our bottles.**


plantbottle™

Up to 30% made
from plants.
100% recyclable
plastic bottle.

Coca-Cola
The Coca-Cola Company © 2014

Section B

Text 2

The text below describes a group of children at play. Read it carefully and answer Questions 5 to 13 in the Question Booklet.

- 1 It was still too hot to play outdoors. They had their teas, they had been washed and had their hair brushed, and after the long day of confinement in the house that was not cool but at least a protection from the sun, the children strained to get out. Their faces were red and bloated with the effort, but their mother would not open the door, everything was still curtained and shuttered in a way that stifled the children, made them feel that their lungs were stuffed with cotton wool and their noses with dust and if they did not burst out into the light and see the sun and feel the air, they would choke. 5
- 2 They wailed so horrendously that she actually let down the bolt of the front door so that they burst out like seeds from a crackling, over-ripe pod into the veranda, with such wild, maniacal yells that she retreated to her bath and the shower of lavender powder and the fresh towel that were to help her face the summer evening. 15
- 3 They faced the afternoon. It was too hot. Too bright. The white walls of the porch glared stridently in the sun. The flowers hung about it, purple and magenta, in livid balloons. The garden outside was like a tray made of beaten brass, flattened out on the red gravel and the stony soil in all shades of metal - aluminum, tin, copper and brass. No life stirred at this arid time of day - the birds still drooped, like dead fruit, in the papery tents of the trees; some squirrels lay limp on the wet earth under the garden tap. The outdoor dog lay stretched as if dead on the porch mat, his paws, eyes and ears and tail all reaching out like dying travellers in search of water. He rolled his eyes at the children - two white marbles rolling in the purple sockets, begging for sympathy - and attempted to lift his tail in a wag but could not. It only twitched and lay still. 20
- 4 Then, perhaps roused by the shrieks of the children, a band of birds suddenly fell out of the mango tree, tumbled frantically in the still, sizzling air, then sorted themselves out into battle formation and streaked away across the white sky. 25
- 5 The children, too felt released. They too began tumbling, shoving, pushing against each other, frantic to start. Start what? Start their business. The business - of play. 30
- 6 "Let's play hide-and-seeK." 35

- 7 “You’ll be It.”
- 8 Why should I? You be –”
- 9 The shoves became harder. Some kicked out. The motherly Moira 40
intervened. She pulled the boys roughly apart. There was a
tearing sound of cloth but it was lost in the heavy panting and
angry grumbling, and no one paid attention to the small sleeve
hanging loosely off a shoulder.
- 10 “Make a circle, make a circle!” she shouted, firmly pulling and 45
pushing till a kind of vague circle was formed. “Now clap!” she
roared and, clapping, they all chanted in melancholy unison.
Reghan was It. He started to protest, to cry, but it was too late, the
others had all streaked away.
- 11 There was no one to hear when he called out, “Only in the porch- 50
the porch!” No one had stopped to listen, all he saw were their legs
flashing through the dusty shrubs, scrambling up brick walls,
leaping over compost heaps and hedges, and then the porch
stood empty in the purple shade of the flowers and the garden was
as empty as before; even the limp squirrels had whisked away, 55
leaving everything gleaming, brassy and bare.
- 12 Only small Mufasa suddenly reappeared, as if he had dropped out
of an invisible cloud or from a bird’s claws and stood for a moment
in the centre of the yellow lawn, chewing his finger and near to
tears as he hears Reghan shouting, with his head pressed against 60
the porch wall, “Eighty-three, eight-five, ninety...” and then made
off in a panic, half of him wanting to fly north, the other half
counselling south. Reghan turned just in time to see the flash of
his white shorts and the uncertain skittering of his red sandals, and
charged after him with such a blood-curling yell that Mufasa 65
stumbled over the hosepipe, fell into its rubber coils and lay there
weeping.

adapted from Games at Twilight and Other Stories by Anita Desai

Section C

Text 3

The text below discusses the link between sports and genetics. Read it carefully and answer Questions 14 to 19 in the Question Booklet.

- 1 Ron Duguay, sat in a doctor's office, fiddling with his mammoth New York Rangers championship ring. Famous in the 1980s for playing without a helmet, the man who played 12 years in the National Hockey League braced for bad news.
- 2 He was in the offices of Dr. Braverman, hoping to get some help with his deteriorating memory. "People tell me I should write a book about my career," Duguay said, "but I'd have to call my teammates. There's a lot I can't remember." He guesses he had between one and three serious concussions during his career, and he frequently suffered hits on his unprotected head. After a battery of tests, Braverman informed Duguay that he had flunked three tests of his memory and of the processing speed of his brain. "He's a mess compared to his old self," Braverman said. Braverman also ordered a test to see what versions of the ApoE gene Duguay has.
- 3 Duguay's grandmother died from Alzheimer's disease. Studies on Alzheimer's patients found that a particular variant of the ApoE gene is linked to a higher risk of developing this disease. Each person has two copies of the ApoE gene. Each copy would be ApoE2, ApoE3, or ApoE4. People with one copy of the ApoE4 gene are three to four times more likely to get Alzheimer's, while people with two ApoE4 copies have eight times the risk. Alzheimer's patients with ApoE4 variants also tend to show dementia at an earlier age than Alzheimer's patients who do not have this particular variant.
- 4 A series of smaller studies also suggests that athletes with ApoE4 variants who get hit in the head are more likely to recover slowly and to suffer a greater form of dementia later in life. It is no entirely clear how ApoE4 affects brain recovery, but the gene is involved in the inflammatory response of the brain after injury, and people with the ApoE4 variant appear to take longer to clear their brains of amyloid, a protein, which floods in heads after trauma.
- 5 A 1997 study of 30 boxers found that those who had taken many blows to the head and had an ApoE4 copy scored significantly worse on tests of brain impairment than similar fighters who did not have the ApoE4 copy. The ApoE4 copy is present in less than 25% of the general population but it was present in all three of the boxers in the study who were severely impaired. In 2000, a study

- of 53 active professional footballers concluded that three factors caused some players to score lower than others on brain function tests: age, having been hit in the head a lot, and possessing an ApoE4 variant. 40
- 6 Barry Jordan, the chief medical officer of the New York State Athletic Commission, considered requiring ApoE screening for all boxers in the state, but then backed off. Doctors agree that more understanding of how ApoE4 affects brain recovery is needed before a genetic test becomes common practice. Jordan and James Kelly, a neurologist, cited two other arguments against offering the ApoE test to athletes: first, teams and insurance companies may unfairly discriminate against athletes with certain genes; second, to tell someone he has an ApoE4 variant is to tell him his risk of developing Alzheimer’s - information he might not want to know. “With ApoE4, some would argue that knowledge is not power,” Kelly says. “The world of genetics for decades has suggested that there’s no reason to give people genetic-risk information unless there’s something proven you can do about it.” 45 50 55
- 7 “If this gene is how you’re describing it and I knew I had it when I was playing,” Duguay muses, “I would’ve considered wearing a helmet.” His test showed that he has one ApoE4 copy.

adapted from “Sports Genes” in Sports Illustrated

Section A [5 marks]

Answer Questions 1 to 4 based on Text 1 on page 1 of the Insert.

1. What is the intended message of the poster? [1]

2. Look at the main image of the poster. With reference to the text 'They make foes reach out to become friends. They also make our bottles', explain how the image supports the intended message. [2]

3. How does the advertiser support its claims that it cares about nature? [1]

4. Refer to the text below the main image. Write down the phrase which indicates their products may be misrepresented in terms of how environmentally friendly they are. [1]

Section B [20 marks]

Answer Questions 5 to 13 based on Text 2 on pages 2 and 3 of the Insert.

5. “They had had their teas, they had been washed and had their hair brushed ...” (lines 1-2)

(i) What do these lines tell you about the children’s daily schedule? [1]

(ii) What does it suggest about how they are taken care of? [1]

6. “... everything was still curtained and shuttered in a way that stifled the children, ...” (lines 6-7)

What is unusual about the way the children are being looked after? [2]

7.(i) Identify the simile in Paragraph 2. [1]

7.(ii) How is this effective in describing how the children felt when they were allowed outdoors? [1]

8. What do the following expressions suggest about what the author thought of the animals? [2]

Expression	What the author thought of the animals
"the birds still drooped, like dead fruit" (lines 21-22)	
"dog lay stretched as if dead on the porch mat, his paws, eyes and ears and tail all reaching out like dying travellers in search of water" (lines 24-26)	

9. Why do you think "no one paid attention to the small sleeve hanging loosely off a shoulder" (lines 43-44)? [2]

10. 'He started to protest, to cry, but it was too late, the others had all streaked away.' (lines 48 to 49). What does this suggest about how Reghan felt about being "It"? [1]

11. "... all he saw were *their legs flashing through the dusty shrubs*, scrambling up brick walls, *leaping over compost heaps and hedges*, ..." (lines 51-53)

Paying attention to the words in italics, what does this imply about how the children felt about the game? [2]

12. Explain how the language used in Paragraph 12 suggests Mufasa had a fear of getting caught. Support your ideas with three details from the paragraph. [3]

13. Complete the flow chart below by choosing one word or phrase from the box below to summarise the main focus of each part of the text. There are some words or phrases in the box you do not need to use. [4]

Main Focus

impatience	suffocated	aloof	pent-up energy
frantic	annoyance	frenzied excitement	bad behaviour

Flow Chart

Paragraph 1
(i) _____

Paragraph 2
(ii) _____

Paragraph 9
(iii) _____

Paragraph 11
(iv) _____

Section C [25 marks]



Answer Questions 14 to 19 based on Text 3 on pages 4 and 5 of the Insert.

14. In paragraph 1, which phrase indicates that Duguay was feeling nervous?
[1]

15. "He's a mess compared to his old self" (line 13). With reference to Paragraph 2, suggest what Duguay's "old self" was like. [2]

16. **In your own words**, what adverse consequence is associated with Alzheimer's patients with ApoE4 based on Paragraph 4? [2]

17. Below is a conversation between two students, Aliff and Sofia, who have read the article.

	I agree with James Kelly that knowledge is not power when it comes to ApoE4.	I definitely disagree. Surely athletes can take preventive measures if they know they have the ApoE4 gene.	
Aliff			Sofia

(i) With reference to Paragraph 7, justify Aliff's statement. [1]

(ii) How do you think Sofia could explain her position with reference to Paragraph 6? [2]

18. "If this gene ... I would've considered wearing a helmet." (lines 57-59)
Why is Duguay's claim ironic with reference to the threat of Alzheimer's facing those with the ApoE4 variant. [2]

19. **Using your own words as far as possible**, summarise the links between possessing the APoE4 gene variant and possible negative health effects. [15]

Use only information from paragraphs 4 to 6.

Your summary must be in continuous writing (not note form). It must not be longer than 80 words (not counting the words given to help you begin).

People with the ApoE4 gene variant are more likely to ...

Number of words: _____